



ACEI working paper series

**WHY DO PEOPLE (NOT) COUGH IN CONCERTS?
THE ECONOMICS OF CONCERT ETIQUETTE**

Andreas Wagener

AWP-05-2012

Date: December 2012

Why Do People (Not) Cough in Concerts?

The Economics of Concert Etiquette

Andreas Wagener
University of Hannover
School of Economics and Management
Koenigsworther Platz 1
30167 Hannover, Germany
wagener@sopo.uni-hannover.de

Abstract: Concert etiquette demands that audiences of classical concerts avoid inept noises such as coughs. Yet, coughing in concerts occurs more frequently than elsewhere, implying a widespread and intentional breach of concert etiquette. Using the toolbox of (behavioral) economics, we study the social costs and benefits of concert etiquette and the motives and implications of individually disobeying such social norms. Both etiquette and its breach arise from the fact that music and its “proper” perception form parts of individual and group identities, convey prestige and status, allow for demarcation and inclusion, produce conformity, and affirm individual and social values.

Keywords: Concert etiquette, social norms, music.

JEL classification: Z11, Z13, D02.

„Aber, aber, Wozzeck, er hätte doch nicht husten sollen!“

[But really, Wozzeck, you should not have coughed!]

Alban Berg (1925), *Wozzeck*, Act 1, Scene 4.

1. Introduction

A concert of Western classical music is peculiar in several respects (Small 1997, 1998): the musical pieces performed are intangible and emotionally loaded; they form part of individual and social identities and are held to have value and meaning over and above the individual performance. Jointness in the experience of music embeds audiences and musicians into communicative and strategic interaction. Audiences do systematically not represent cross-sections of society but come from certain identifiable subgroups. The concert hall and its architecture separate the event from everyday life. Last, not least, the occasion is governed by an elaborate set of customs and by a quite rigid code of conduct.

This code of conduct entails that the audience observes an etiquette that includes the avoidance or suppression of noises while the music is played. Uninhibited coughing clearly breaks this etiquette, and not only aficionados consider coughing during classical concerts and opera performances a major nuisance. Yet, as every casual concertgoer will attest, coughing is ubiquitous with classical audiences. In fact, coughs occur more frequently in concerts than elsewhere. They also exhibit certain patterns: they preferably occur in slow, quiet, sublime moments of the performance or during complex and unfamiliar pieces. Coughs in concerts also are mysteriously contagious: a single cough often triggers a full sequence of follow-ups. Coughing in concert, thus, is not an accidental physiological reflex but should, to a great degree, be regarded as a willful, chosen action (Section 3).

The tacit rule not to cough during the performance and other elements of concert etiquette that constrain audiences to a limited repertoire of reactions in concerts certainly are tiny cultural rituals, and their frequent transgression may appear irrelevant to all but some zealots. Yet, both concert etiquette and its breach are aligned with a number of facets of classical *musicking*, as the social experience of music is often called (Small 1998). More general, the commandments of concert etiquette are social norms in the sense of Elster (1999, pp. 145f): rules shared by a group (the audience), sustained both by sanctions (e.g., being shushed) and negative emotions (shame or guilt, say), with the characteristic that they induce their followers to forego selfish benefits (physical comfort, expressive freedom etc.) for the

sake of group benefits (the concert atmosphere). Social norms as well as their breach are instruments employed, both societally and individually, to pursue various goals – which deserve to be studied from a wider perspective than the purely musicologist. (Behavioral) economics might have a say here.

Using coughing in classical concerts as a curious example we, first, try to find out why concertgoers transgress rules of etiquette so frequently. We delineate expressive, participatory, evasive, and informative motives. They all indicate that audiences are well aware of the strategic and dramatic qualities of the concert situation: in a concert, audience and performing artists jointly produce social and aesthetic experiences but audiences are confined to speechless silence by concert etiquette. Due to their ambiguity – they may always be forgiven as bodily reflexes – coughs are a noisy substitute for direct, verbal communication and participation. They allow for social interaction up to contagious herding, propagate (possibly incorrect) assessments of the performance and reassure concert-goers in their aesthetic judgments (Section 4).

Classical concerts and their etiquette are socially constructed. In the freewheeling concerts of Mozart's time or in jazz music coughs and other noises would be met with indifference by audiences and musicians. However, at least since the 1820s, coughs are held to cause negative externalities in classical concerts: they threaten the quality and aura of the performance. Sociological and economic theories help to explain *why* societies would embrace such norms. In a way, all such theories hypothesize that with the good “music” it does not only matter *what* is consumed; rather, the way how this consumption is *socially understood* may be more relevant (Currid 2007). Music and its perception define individual and group identities, convey prestige and status, allow for demarcation as well as inclusion, produce conformity, and affirm individual and social values. Recent theoretical advances on social and individual preferences, consumer behavior, or the economics of religion can be readily transferred to the realm of music (Section 5).

Concert etiquette is amenable to cost-benefit analysis (Section 6): it reinforces social stratification and may cause preference falsification -- but it also provides the basis for certain types of music production and serves as a status marker. Loosening its strictures may generate an equity-efficiency trade-off, substituting accessibility for quality in performances. Moreover, the aggregate obedience to a norm may be more a contingency than a predictable outcome -- and nostalgic cultural pessimism might actually provoke concert etiquette to derail.

2. Classical concert etiquette

For many enthusiasts coughing in classical concerts is a nuisance: it distracts audience and performers, diminishes the acoustic and artistic quality of the performance, disrupts the celebration of music, and destroys the aura of the event. Economically, a cough imposes external costs on musicians and the rest of the audience while it benefits its issuer (e.g., by clearing the throat or by sending a comment). As standard theory predicts, activities with negative side effects are over-supplied, and indeed there appears to be “too much” coughing in concerts (see Section 3).

Yet, this “too much” presupposes that coughing should be avoided as far as possible during a concert. The same applies to other “disturbances”: mobile phone ring-tones, hacking, talking, tapping one's feet, strolling around, snacking etc. The only purpose of a classical concert— at least when the music plays – should be the performance and reception of this music. Specifically, in an ideal concert,

- there is a clear separation between performing artists and the audience;
- musicians are to perform the musical works exactly as indicated in the score, at the best technical and musical quality, and with the intention to convey a meaningful interpretation;
- audiences are to listen seriously and quietly and to devote full concentration to the music.

Such an ideal concert can be viewed as resting on an *implicit* contract between artists and audience: the former oblige to perform in exchange for the latter following carefully. E.g., the Viennese press of 1841 reminded audiences of the covenant between concertgoers and performers:

"The latter commits to sing or play, whereas the former are obliged to listen with attention, with interest" (own translation from Reiber 2005).

Clearly, such a contract is quite loose, and many attempts to formalize the obligations in concert contracts were undertaken over the past 200 years (or so). Concert societies, music journalists, and performing artists in the 19th and early 20th centuries tried hard to domesticate audiences by regulations and exhortations – albeit with moderate success only (Salmen 1988; Reiber 2005). Notes on concert etiquette in program booklets are common in the US, and admonitions to switch off mobile phones are

issued before performances all around the world.

Concert contracts inevitably remain incomplete: neither the quality of the performance nor the careful attention to it can be fully prescribed or verified by third parties. As a consequence, both parties of the concert contract are potentially exposed to *hold-ups*: artists may “underperform” – and audiences may respond with unruly behavior. Or *vice versa*: as plenty of anecdotes report, noises from the floor may make artists interrupt or abandon their performance. Some artists scowl at the audience, others admonish or chastise it, others leave the stage.¹

3. Cough frequencies in concerts and elsewhere

Coughing is a sudden and often repetitive release of air from the lungs, typically accompanied by distinctive sounds. Physiologically, it serves to clear the upper respiratory passage from mucus and fluid secretions. Though experienced by every human, surprisingly little data exists on cough frequencies (for surveys see Chung et al. 2003, Chs. 1 and 2). Healthy adults cough around 16 times in 24 hours, with a range between one and 34 coughs (Hsu 1994; Schulz 2005) or one to two times an hour (Birring et al. 2006). Coughing is more frequent in cold seasons and peaks over the day between 11 a.m. and 2 p.m.

Even at normal frequencies, coughs are concert-immanent: Assuming that each person coughs purely randomly, independently of everybody else’s coughing and at a time-invariant rate (homogeneous Poisson process), a normal frequency of 16 coughs per day corresponds to 0.0555 coughs in a five-minute interval. The likelihood that an individual will cough during a five-minute interval then is $1 - \exp(-0.05555) = 0.05404$, and the probability that *nobody* in an audience of N people will cough during a five-minute interval equals $(1 - 0.05404)^N$. For a small concert hall with $N=200$ people (the Golden Hall in Vienna's *Musikverein* or New York’s *Carnegie Hall* seat well above 2,000 people), this

¹ "Do not cough until the concert is ended. Because I love this music so much", Baritone Thomas Quasthoff reprimanded the audience at a performance of Brahms’ "Four Serious Songs" at Alice Tully Hall, May 24, 2001). Pianist Alfred Brendel – known for his aversion against concert noises – warned his audience: “Either you stop coughing or I stop playing.” He even wrote a poem “Die Huster von Köln” (“The coughers from Cologne”). In “Rabbit Rhapsody” (1946), pianist Bugs Bunny even shoots an audience member whose coughs disturb his performance of Liszt’s Hungarian Rhapsody No. 2 (<http://www.youtube.com/watch?v=wy6IZp-oMA>). Such behavior is not confined to the classical realms: in 2006, Jazz pianist Keith Jarrett walked out in a Paris concert after the audience failed to stop coughing.

amounts to 0.0015 percent, making the undisturbed performance even of a short piece of music extremely unlikely.

Substantial evidence suggests, however, that coughing in concerts is excessive and non-random. First, the prevalence of coughing in concerts is significantly higher than elsewhere: an average concertgoer coughs around 0.025 times per minute (Schulz 2005; Loudon 1967) – which (under the assumption of a Poisson process) would imply 36 coughs on average per person and day, far more than double the normal cough rate. Sneezes, hiccups, and yawns are in general about as common as coughs (Simonyan et al. 2007). Unlike coughs, however, they are involuntary as they cannot be willfully produced with their complete pattern. Yet, one rarely hears hiccups or sneezes during music performances.

Second, if coughing were purely accidental, it should occur evenly distributed over the concert – which is not the case: the volume of coughing increases with the complexity and unfamiliarity of the music performed; slow movements and quiet passages are more frequently counterpointed with coughs than fast and extroverted ones; and atonal, complex pieces from the 20th century are underscored by heavier concert noises than the more harmonious and familiar pleasantries from earlier times.

Coughing in concerts is endogenous and can be “switched off”. Pianist Alfred Brendel once interrupted a recital in Hamburg, reprimanding the audience to “cough more quietly”. His experience from this and similar rebukes is that

„[a]fter such announcements the audience typically stays perfectly silent for the rest of the evening, evidencing clearly that one need not cough“ (Weber 2006; own translation).

In fact, coughing and its suppression are to a substantial degree willful actions. Experimental evidence shows that humans are not only able to activate but also to suppress cough on demand, independently of sensory stimulation (Eccles 2009; Simonyan et al. 2007). Even the “innocent” coughing during a common cold is regarded by medical scientists as a mixture of both reflex and choice (Lee et al. 2002).

Third, the members of orchestras (often more than 100 musicians) and choirs hardly ever cough during the performance – though professional singers are more likely to suffer from bronchial problems than

the average population (Cammarota et al. 2007). Also movie-goers rarely cough.

Fourth, while music psycho-physiologically affects heart and pulse rates, skin conductance, blood pressure, and body temperature (Bartlett 1996), its effects on the respiratory system are unclear. In particular, there is no evidence that, or reason why, music should physiologically provoke more frequent coughing (Hodges 2010).

Fifth, silence in the concert hall is a public good, being jointly consumed and provided by a weakest-link type technology. Economic theory predicts that under- or non-provision of such goods is more likely the larger is the group. This is experimentally confirmed for coughing: Pennebaker (1980) shows that the larger is the audience, the more coughs occur *per person*.

Finally, coughs often move in cascades through audiences, indicating that – unlike everyday coughs – a person’s coughing in concert is not independent of others’. It is part of a social process and not just a physiological phenomenon (see Section 5.6).

A statistical explanation why coughs occur so frequently in concerts could be that concert-goers are not representative of the population. In particular, they are significantly older than the average (Borgonovi 2004; Abbing 2006; Eckhardt et al. 2006). While there is no general age effect on cough frequencies, older people often suffer from hypertension or congestive cardiac failure. In such cases, a pharmaceutical of choice are so-called ACE inhibitors. A common adverse reaction to these drugs is a persistent dry cough. Some fraction of excessive coughing in concerts might, thus, originate from here. Yet, even the extreme assumption that the entire audience was on ACE inhibitors would not suffice to explain the actual rate of coughing in concerts.²

Concert coughs, thus, must be regarded as willful and voluntary to a substantial degree; most people would be able to suppress and forestall their urge to cough for some time. But why then do people cough in concerts? Several motives can be distinguished.

² The incidence of ACE inhibitor-induced cough has been reported to be in the range of five to 35 percent; a number of ten percent seems to be a fair point estimate (Morice et al. 1989, Dicipinigaitis 2006).

4. Cough motives

4.1 Coughing as expression

Coughing might be purely expressive: an intentional action without the aim at changing the outside world. Expressive actions serve to substantiate or confirm one's identity (Hillman 2010; Schuessler 2000 [p. ix]), they carry intrinsic but not instrumental values: "the action itself, rather than the outcome it can be expected to produce, is what matters" (Elster 1986, p. 24).

In concerts, the utility gains from coughing may purely from the opportunity to make a statement (independent of its content). Expressive behavior is likely to arise only under certain conditions. First, as argued by Schuessler (2000, p. 87), the issues at stake can indeed generate expressive attachment (rather than, say, solely instrumental pocket-book motives). Music clearly fulfills this requirement. Musicologists indeed argue that, moderated by the easy access to music of all genres, listening itself today has entirely become an expressive act. Music generates "a sense of identity within an often impersonal environment" (Bull 2000, p. 24), and music preference is a means for managing self-identity (North and Hargreaves 1999). Music consumption fulfills the human need to reflect and reinforce cultural, social and personal values (North et al. 2005; Hennion 2001), and identity components are more prevalent in music consumption than in other activities (Rentfrow and Gosling 2003; Berger and Heath 2007).

A second component of expressive behavior is the "detachment" of act and outcome: individual actions do not noticeably impact on the aggregate outcome (like with voting in large populations). Classical concert organization traditionally aims at such a dissociation: it separates performing artists from listening audiences and reserves an entirely passive role to the latter, allowing them to respond to the performance only afterwards, with their applause (Chanan 1994). The primacy of the occasion resides in the artwork itself, in the composer's or the performers' intention. A cough issued by an audience member who has internalized this notion of a concert would indeed not be supposed to change anything (to improve the performance, say); it may just be a statement to make oneself heard or to signal its issuer's view of "how things should be".

4.2 Coughing as participation

Historically and compared with other musical genres, passive audiences are quite unique, however. Typically, musical gatherings offer(ed) to their audiences wider arrays of participation and possibilities of commentary. Before 1800, cheers but also disapproving comments might break out during performances at any time; rock fans offer running commentary; jazz fans applaud after solos. Even with strict behavioral constraints, music's emotional qualities would probably never stop audiences from harboring feelings, forming opinions and showing physical reactions. Given that it may always be viewed as a physical reflex, coughing is one of few acceptable ways of active participation within strict concert etiquette. It permits to make oneself heard in the anonymous crowd of concertgoers, to test unwritten boundaries of courtesy, to comment on the performance or to simply document one's presence.

The perception of classical audiences has been changing over the past decades (see Radbourne et al. 2009): audiences are seen to contribute to a *co-creation* of aesthetic values. Theatre, opera and concert are increasingly viewed as a communicative intersection between the performers' actions and the spectators' reactions. John Cage famously turned the audience's behavior into a compositional tool: in his three-movement composition *4'33"* (written in 1952), performers are instructed to *not* play their instruments (which can be any) for 4 minutes and 33 seconds -- the ambient sounds *are* the performance (Davies 2003). In the same spirit, some musicologists consider the "audience as producers" (Hand 2000). Audience trends point to a higher demand for interactive and multisensory experiences, away from static and passive experiences (Sigurjonsson 2010; Radbourne et al. 2009).³

4.3 Coughing as (non-intentional) commentary

Concertgoers who expect to find pleasant melodies, steady beats, technically perfect performances or enjoyable entertainment may easily be disappointed. Deprived by concert customs of the possibility to

³ For concert noises, the co-creative aspects have been recognized in fiction. In "The Philharmonic Cough", Ephraim Kishon (1989) ironically argues that a genuine concert requires that the audience masters the "difficult art of concert coughing". In the same vein, late German comedian Loriot wrote a piece for orchestra and concert coughers, dedicated for the centennial of the Berlin Philharmonic Orchestra (<http://www.youtube.com/watch?v=1C8b3paSp3Y>).

explicitly show disapprobation with the music or to abandon the performance, coughing may be an effective comment if musicians play poorly or perform music the listeners do not like. Audiences' affective behavior of dislike and the associated bodily reactions are well documented for contemporary music, which is often associated with chaos, agitation or frantic activity (Smith and Witt 1989).

Things might be even more profane: conductor Sir Colin Davis once stated that he felt that audiences cough out of boredom. The experiments in Pennebaker (1980, 1982 [ch. 2]) support this view. They show that movie viewers cough substantially more during boring than during interesting portions of movies. The correlation between the number of coughs and the degree to which a movie scene was rated as "interesting" was -0.57. Pennebaker (1980) explains this as follows: interesting [boring] parts of movies offer relatively more [less] information to be processed by the viewer, and consequently decrease [increase] the probability of a viewer's attendance to potential irritations of his throat or other bodily phenomena. Coughs will be emitted once such a perception is noticed, and interesting performances distract from that perception. Even a somatic cough then is a negative comment: the performance is too weak to even distract from an itching throat.

Coughs clearly signify something negative: their sound evokes negative phenomenal experiences in those who hear it (Huron 2005). Yet, the provocation by coughs is ambiguous since, unlike booing or verbal messages, coughing might be given alternative readings, ranging from a meaningless body reflex to a strong warning that one does not like the music. This semantic ambiguity may be reason enough for placing a "cough sign" rather than its verbal equivalent (Harré 1994).

4.4 Coughing as "tax avoidance"

Concert attendance with a strict etiquette is not pure fun: physical rigidity on narrow and hard concert chairs, speechless attendance and suppression of many vital functions, restraint on emotional expressions and social communication are quite taxing. As with fiscal taxes, people try to avoid such impositions – by substituting taxed activities by untaxed or lesser taxed ones. Compared to other illicit ways of expression (shouting, walking away, clapping, shuffling etc.), coughing is less heavily penalized since it may always be attributed to health conditions for which the cougher cannot be held responsible. Individual listeners do not dare stand up in mid-performance and speak their minds, but disapprobation can non-verbally and condonably be issued through coughing. Overly frequent coughs

in concerts may just be the mirror image of a prohibitively high “tax” on other forms of reactions to the concert performance.

4.5 Coughing as information

A cough message that conveys that something with the music might be objectionable might be valuable for others in the audience, particularly for those who are unable to assess the quality of the music or its performance by themselves. Ample empirical evidence suggests that aesthetic responses to music are indeed heavily influenced by the immediate environment. In particular, conformity in music reception comes in two distinct forms: *compliance* and *prestige* (North and Hargreaves 2008). Compliance arises from people seeking to belong to, and conform to particular social groups that share common values, beliefs, or habits; holding the same music preference is one possibility to express group membership. Prestige – or, maybe better, “informational influence” -- is the desire to make correct judgments about the music (North and Hargreaves 2008). It is especially important when only little is known about the quality of the music or its performance. Individual members of the audience then try to acquire information and to update their own assessment from the judgments of others.

Informational externalities of this type are indeed powerful with music. Among the arts, music appears to be the one where non-expert consumers are most gullible to expert influence (North and Hargreaves 2010, p. 532).⁴ Ordinary listeners do not attend to technical details (phrasing, tempi, etc.) that are important to experts; rather they attend to the overall impression and affective experience. Yet, they are willing to follow experts. Pennebaker (1980)’s experiments confirm the “informational influence”-hypothesis: when subjects viewed movie sections that they were told had previously been rated for their interest value, subjects were more likely to cough during the allegedly uninteresting portions.

4.6 Cough avalanches

The view that coughs generate positive information externalities opens a new perspective on the herding phenomenon of concert coughing: learning from the cough that others in the audience find

⁴ Mark Twain’s ironic dictum that “Wagner’s music is better than it sounds” illustrates this submission of one’s aesthetic judgments to others. Salganik et al. (2006) demonstrate that individual music preference (measured by song ratings at an artificial internet market) largely depends on the judgment of others, even when respondents did not know those people.

something objectionable reassures every single listener of his critical stance and encourages him to cough too. Pennebaker (1980)'s experiments confirm this *informational mimetism*: people are more likely to cough if they hear others cough, and the closer a person is seated to a cougher the greater the likelihood that she will also cough. Banerjee (1992) argues that audiences obtain information from observing others and are therefore *inclined* to imitate those with presumably superior knowledge.

Such behavior sets off an information cascade, i.e., a sequence of decisions where it is optimal for agents to imitate the decision of agents ahead of them (Bikhchandani et al. 1992; Jackson 2008, Ch. 8). In a concert, this works as follows. Each individual forms an opinion as to whether he is experiencing a “good” or a “bad” performance. Individuals are, however, not entirely convinced of their assessment: when they feel that the performance is good [bad], they only attach a probability of less than one that the performance “really” is good [bad]. If confidence in the own verdict is large enough, an agent coughs. For others, this cough signal is (not only literally) noisy: it might involve a negative comment but could also just be a physical reflex, without any message. Yet, it leads to a (Bayesian) updating of individuals' own judgments of the performance. If coughing is informative (i.e., with probability greater than 0.5, it signals that a cougher finds something objectionable), every cough increases the likelihood that someone else will also cough. An avalanche may start – with disturbing features:

- The more imprecise private judgments (e.g., the less expert the audience), the more likely are unsubstantiated cough cascades: even good performances will be coughed down.
- If individual signals are noisy enough (i.e., if audiences are uninformed), the probability of an incorrect cascade (= negative assessment of a good performance) can be as high as 50%.

In an information cascade, conformity in behaviour arises even with the possibility that everybody ignores his own tastes. Cascading involves no judgement but simply requires gullible submission to the “wisdom of the crowds” – an effect that even arises with classical audiences who are typically considered as erudite, intellectually independent, and individualistic.

5. Why concert etiquette?

Before the 1700s, independent settings whose main purpose was the performance of music were unknown. Rather, musical activities were associated with other institutions -- courts, taverns, families, churches etc. Only in the 18th century did the pursuit of music evolve into a world of its own -- with institutions (opera houses, musical societies, concerts) and behavioral patterns. Concerts before the 1820s had, however, an informal, sometimes haphazard nature (Johnson 1995; Carruthers 2000). The music was a backdrop for displays of food, drink, and fancy dress. Serious attention was rare (Weber 1997); audiences focused on who else was there, how they dressed, how they behaved, and otherwise indulged on a happy vacancy. Rather than sitting through the concert in silence, audiences wandered through the premises, conversed loudly, and commented the music with noisy signs of (dis-)approbation during performances (McVeigh 1993; Weber 1997).

Elaborate concert protocols, concert etiquette and the notion of the audience as a collection of silent listeners came into existence during the first half of the 19th century. While the process ran with different pace and intensity in the various musical centers, it is characterized by common stylized facts (Schwab 1980; Chanan 1994; Scherer 2001, 2003 [Ch.2], Weber 2001): the emergence of professional composers, the birth of the concept of musical works, the production and publication of scores, the transition from patronage to a market system with commodified music and middle-class audiences, the emergence of a musical canon, venues only for music performances (concert halls, music halls) etc.

Various complementary sociological and economic theories help to explain the emergence of concert etiquette (see, e.g., Smithuijsen 2001, Ch. 2; Leppert 1989, 2002; Metzger 1999; Mueller 2006). In essence, these theories view preferences over music as symbolic of identity – individual or group-specific, and modes of consuming music as revealing those preferences. However, the thrust is not uniform. *Status theories* stress that individuals want to set themselves apart from others; the focus here is on divergence or distinction (Elias 1992, Bourdieu 1984 etc.). A “proper” appreciation of music signals status as it involves expenses in time and money, requires training or discipline, signifies moral superiority or conveys political correctness. Other theories emphasize the idea of *conformity*, e.g., of shared group identities (as in Akerlof and Kranton 2000 or Tekman and Hortaçsu 2002), consumption patterns (Leibenstein 1950), or opinions (Bikhchandani et al. 1992).

5.1 Music and rationality

Max Weber saw an ever-increasing rationalization of all aspects in social life to be the overriding tendency of Western culture. In music, he finds his hypothesis supported in the establishment of the temperate tuning systems, the development of notational systems, sophisticated polyphony or large-scale instrumental forms (Weber 1969). Music became more and more professionalized and compositions more complex, reducing accessibility. An adequate music reception required schooling, cultivation, experience – and an emotionless and ascetic attitude. While Weber himself is tacit on concert etiquette, his likening of music as a “rational religion” indicates that coughing and other emotions – not to speak of the haphazard musical gatherings of previous times – evidence an antirational, “charismatic” approach to music (Botstein 2010).

5.2 Aesthetic perception and moral superiority

A rational approach to music and its reception was most influentially developed by 19th-century music critic Eduard Hanslick (1825[1854]). Famously, for Hanslick music is “sounding, moving forms”: only its formal or technical characteristics are aesthetically relevant. Consequently, the apprehension of music ought not to include feeling, neither the composer’s nor the performers’ or the listeners’.

Hanslick distinguishes aesthetic (active, informed) from pathological (passive, emotional) listening, being very clear that music as an art requires and deserves only the former. Pathological listeners merely “feel” through the music; Hanslick likens this dumbed-down music consumption to bingeing or taking drugs. From here, it only takes a small step to align the appreciation of fine arts and music with a moral force for good (Jensen 2002): as the arts reflect rationality and values of civilization, their appreciation is clearly indicative of a virtuous character. Conversely, the popular is easily stigmatized as low-brow, debasing virtues and fostering a dangerously expressive culture (Petersen 1997). Sitting silent through a concert or, more generally, the disembodied and rational perception of sophisticated music signals moral superiority. Concert etiquette and specific musical tastes partition the population into the uncouth riffraff, seeking enjoyment for the purpose of lower, coarse, and profane indulgences, and the upright who seek aesthetic enjoyment and sublimated, sophisticated pleasures.

5.3 Self-assurance

Since the mid of the 19th century, concert etiquette can also be understood as part of the identity of the *bourgeois* or *Bildungsbuerger* strata. Its rules can be portrayed as an imposition of bourgeois propriety upon the more freely expressive and unruly poor and working classes. For a bourgeois audience, emotional restraint marked the line between themselves and the working class. A “respectable audience” by the 1850s was an audience that knew to control its feelings in silence. The spontaneity and liveliness in musical gatherings of the 18th century or earlier was deemed “primitive” (Sennett 1978, p. 206), and sneering at those who displayed emotions during a concert had become *de rigueur*. Concert etiquette helped the bourgeois to understand his place in the social environment and reduced his uncertainty about who he was. As Johnson (1995, p. 232) puts it,

“[p]olicing manners became an act of self-assurance: It confirmed one’s identity by noticing those who did not measure up, whether through (choose your label) ignorance, laziness, bad upbringing, insensitivity, or overall dullness.”

Interestingly, it may precisely be the counter-functionality of concert etiquette – that it makes the music *less* enjoyable – that is most useful in signaling identity. Recent consumer research (e.g., Berger and Heath 2007) finds that the reduced functionality may actually enhance a product’s potential to signal its consumer’s identity: as sunglasses are more of a fashion statement when worn indoors, classical music may be a clearer identity marker when consumed in the confinements of concert etiquette.

5.4 Music and “political correctness”

Starting from Hegel’s dictum that art can disclose truth, Adorno (1949[2006]) arrived at the (controversial) idea that music perception at its best is a way of cognition and thinking about the world. Autonomous music and its analytical reception yield insights into the social and historical workings of the real world; the ambiguity and the lack of objectivity in music create a “second world *sui generis*” which liberates the listener from extant social, economic, and political realities. This keeps awake the awareness that and how things in society could be changed (Bowie 1999).

However, this only works with a “proper” listening to the “right” music. The indulgence in music just for the fun of it and the consumption of popular and commodified music dangerously work into the opposite direction. Mind-numbing, vulgar and acquiescent, they help to liquidate individualism, to immunize people against the flaws of society and to make them appease to the wishes of an authoritarian and commercialized society (Sigurjonsson 2010). To be sure, Adorno himself would not dwell on trifles such as concert coughs. However, his theory implies that coughing in concert – out of lack of attention, for expressive or informative purposes – is indicative of regressive and, thus, politically dangerous music consumption. As far as concert etiquette ensures an analytic reception of autonomous music it epitomizes critical thinking and social progress. Adorno’s philosophy of music amounts to a signaling theory of asceticism: light and pleasant art is indicative of false consciousness, fake happiness and “displeasure in pleasure”. Only the pleasure-free reception of abstract music counts -- conspicuous labor in the name of political correctness.

5.5 Music as religion

Since the early 19th century the arts – and in particular music – have been likened to religion. In a *kunstreligion* the creation of artistic works and the recipients’ immersion impart revelation, salvation and catharsis (Locke 1993; Auerochs 2009). By its abstract and symbolic nature, music provides an ideal vehicle for such a secular religion, as is reflected by composers being likened to prophets or transfigured deities, performers to priests, concert halls to temples, and concerts to divine service. Increasingly, musical listening was submitted to ideas of spiritual contemplation (Kramer 2005).

The economics of religion argues that religion is a club good and, thus, plagued with free-rider problems and difficulties to enforce commitment and enthusiasm to its provision (Iannaccone 1992). Religious organizations counter these problems by demanding sacrifice, obedience to strict behavioral standards or participation in freaky rituals. “Bizarre” rules and social customs then need not imply irrationality but serve two complementary functions: they deter the uncommitted by making participation costly, and they lock committed adherents in (Iannaccone 1992, Olson and Perl 2005). This can readily be transferred to the religion of arts, and concert etiquette may be viewed as an analogue to dietary regimes or a dress codes in common religions. Deterrence of the uncommitted reinforces the separation from others, and lock-in effects promote the accumulation of group-specific social capital. Interestingly, this is in line with the view of concert etiquette as a deliberately

dysfunctional marker, as discussed above (Berger and Heath 2007).

The parallel between classical music and religion also offers an explanation for the decline in concert etiquette. At least with the advent of recording and broadcasting technologies, classical music's potential as a substitute for religion has decreased (Metzger 1999). The easy availability and omnipresence of recorded music and the possibilities of undisturbed music consumption in the privacy of one's room eliminated the necessity of public performances (not to speak of playing music together) and reduced music's potential to define social rituals. Similar to standard religions, the profanation of the arts-religion led to a decline in attendance and more casual attitudes towards rituals.

5.6 Refinement

Elias (2000) charts the development of etiquette towards more refined standards. Historically, the growing complexity of life increased interdependencies between individuals and groups. Individuals were forced to behave with greater consideration of the feelings and interests of more people. Social pressure to constrain animalistic impulses was gradually built in to the individual psyche.

Economically speaking, etiquette reins in externalities and coordinates behavior. Historically, however, the emergence of etiquette and the dissemination of manners were not driven by efficiency concerns, but rather by the desire for social prestige (Elias 2000, p. 395). Upper classes developed and refined manners to distinguish themselves from lower classes; upward social mobility triggered imitative behavior by lower classes and helped upper-class conduct to spread to lower classes – which in turn triggered further refinement of upper-class behavior. This process, reminiscent of the trickle-down theory in the economics of fashion (Robinson 1961), resulted, according to Elias, in “decreasing contrasts, increasing varieties”, the disappearance of sharp distinctions in behavioral standards and a corresponding diversification in subtleties and forms.

Elias' theory can help to explain why concert etiquette has lost many of its strictures recently. As everybody could rapidly learn how to behave in a concert, compliance to the code of conduct does not signal distinctive status any more. In fact, recent research suggests that people abandon formerly distinctive tastes or behavior when members of other social groups adopt them (Berger and Heath 2008). The loss of etiquette's distinctive feature triggered a “highly controlled decontrolling of emotional controls” (Wouters 1986, p. 3). In this process of *informalization* the codes of conduct are

relaxed and “less civilized” behavior becomes (again) admissible. Still, behavioral rules did not cease to perform as status markers. Rather, social inequality can nowadays be assessed by looking at the differences in people’s ability to adapt their conduct to varying settings. People show social competence by selecting the right elements from this richer set of rules.

5.7 Distinction

Bourdieu (1984, p. 18) posits a homology between musical preferences and social position: “nothing more clearly affirms one’s ‘class’, nothing more infallibly classifies, than tastes in music.” One’s upbringing and education influence cultural needs and, in turn, the hierarchy of the arts corresponds to a social hierarchy of their consumers. Beginning with the mid 19th century, consumption of classical music and attendance to concert etiquette became an expression of social stratification; they symbolized, imposed and legitimized cultural leadership. A distinction between popular culture and high arts emerged; shunning the former and appreciation of the latter became status markers.

Bourdieu’s idea of “taste publics” (North and Hargreaves 2008, p. 106) with a strong association between socio-economic status and music preferences has recently been challenged. While North and Hargreaves (2007, 2008) confirmed, for instance, that fans of “sophisticated” music (classical music, jazz) had higher incomes and higher levels of education while fans of rap or electronic music tended to have lower socio-economic status, it also found that individuals with high educational attainment, status or occupational prestige are engaged in considerable *bridging*, i.e., aligning a varied range of music to their own daily experiences. Cultural *omnivores* (Peterson and Kern 1996, Peterson 2005) are familiar with classical music and its formalities but *also* with a wide array of musical genres liked by low-status groups. Yet, omnivorous tastes in musical genres do by no means imply cultural indifference or an end of stratification. To the contrary: in a globalized, multi-ethnic, and diverse world the ability to maintain a broad and inclusive cultural repertoire, including the case-wise adoption of appropriate behavior, represents the new currency of social distinction much better than being confined to a single genre. Voraciousness marks high status through being associated with multi-tasking, openness to experimentation, individuality, and embracing diversity (Ollivier 2008; Sullivan and Katz-Gerro 2007).

6. The costs and benefits of concert etiquette

Concert etiquette views coughers as imposing an externality on others. Yet, recalling the bi-directional, Coasean view of externalities, also the enforcement of no-cough rules might be considered as socially costly. Foremost, the willful suppression of a “true” cough is stressful and painful. Moreover, neither the emergence nor the demise of concert etiquette are good or bad *per se*. Norms may help to coordinate behavior towards efficient outcomes -- but can also impose pointless costs on society (Elster 1999; Festré 2010). Rules of etiquette typically are not Pareto-improvements over libertinage. Conversely, even if a social norm led to a Pareto-improvement, this would not suffice to make it prevail. But what are the social costs and benefits of concert etiquette?

6.1 Preference falsification

To the extent it suppresses participation and expressive impulses of concert audiences, concert etiquette amounts to preference falsification in the sense of Kuran (1990, 1995): audiences affirm opinions and beliefs not because they truly hold them (private preference), but because they find it advantageous to pledge allegiance to palatable views (public preference). What people honestly (dis-)like may differ from what they display to (dis-)like for reputational motives. Quietly sitting through a performance has negative psychological effects on the concertgoer: he loses intrinsic utility by not being allowed to do what he likes best; his desire to be honest about himself is not fulfilled, and his expressive utility, i.e., the value of letting others know how he truly feels, is diminished.

In Bernheim (1994), individuals care about both private (intrinsic) and social status (public preferences), which depends on the public’s perceptions of an individual’s predispositions. Individual actions signal predispositions and therefore affect status. When public preferences are sufficiently important relative to private utility, societies develop uniform and rigid standards of behavior (like concert etiquette), in spite of heterogeneity in private preferences. Related to this is Jensen (2002)’s idea of *cultural spinach*: the arts and especially classical music being (ab-)used as a paternalistic social medicine, “something we know we should like but that we do not really enjoy”.

According to Kuran (1995), preference falsification may lead to a unanimous chorus that affirms

“absurdities”, in particular if the costs of dissent rise. Over the late 19th century disobedience to concert etiquette or the lack of appreciation for classical music became increasingly costly, bearing the risk of exclusion from the economically, morally or intellectually esteemed strata of society. A little later, modern music with its atonality, twelve-tone and serial techniques became increasingly alienated from mass tastes, which viewed these developments as degenerate and absurd. The emergence of an increasingly ridiculous *arts circus* may be one possible consequence of preference falsification in the arts. Televised hoaxes of performances of allegedly serious, but actually nonsensical, fake avant-garde music to unsuspecting audiences exemplify this.

6.2 Cough-freeness as a factor of production

Repressive as it may appear, concert etiquette has contributed substantially to get produced the historical musical repertoire of the 19th and 20th centuries with its refined musical forms and genres, sophisticated techniques of instrumentation, sublime expressivity, or superb artistry of performers. It is hardly conceivable that such aesthetically and emotionally valued cultural products could have emerged from, or be enjoyed in environments with a different set of social conventions than those represented by concert etiquette.

Sennett (1978) even suggests that much of what is cherished until today as genuine in the arts and in artists (even in popular culture) – expressive freedom, libertinage and excessive life-styles – is just the negative image of stricter concert etiquette. Indeed, the silencing of the audience was historically counterpointed by a vast increase in the aural and visual display in concerts. The size of the orchestra grew enormously, reaching its breaking points with Mahler, Richard Strauss and the early Schoenberg. A refined art of instrumentation generated unimagined varieties of sounds, colors and timbres. The length of symphonies, operas and concerts vastly expanded, and Richard Wagner’s style with its continuous texture even eliminated the (cough) pauses between the “numbers” in traditional opera. Archetypal musicians of the 19th century were virtuosi like Paganini and Liszt – musical supermen, feasting on self-expression and uninhibited individuality. While listeners sat silent,

“[t]he artist is forced ever more into a compensatory role in the eyes of the audience, a person who can express himself and be free. Spontaneous expression is idealized in ordinary life, but realized in the domain of art.” (Sennett 1978, p.191)

Johnson (1995, p. 234) calls this the “paradox of bourgeois individualism”: how could the bourgeois society of the 19th century, which cherished individuality, develop a rigid etiquette (not only in concerts) that builds on conformity, propriety and silence?

6.3 Exclusion and audience development

Attendance to classical concerts is currently in decline and audiences are shrinking and ageing. However, this decline does not seem to be caused by a dislike of classical music itself, but by an aversion to the setting in its live performances. A strict concert etiquette is seen as a vestige of elitism and emphasizes personal improvement over the indulgence and pleasure in the music (Kolb 2001). Especially, this turns off younger and less educated people – even though they (might) like the music (Abbing 2006, Toma and Meade 2007).

Concert organizers, orchestra managers and cultural policy have since long become aware of the financial and artistic perils of exclusively associating classical music with distinctive and ossified rituals. They respond: “audience development” has become both a lucrative branch in the marketing industry and a flourishing field of theoretical research (see, e.g., Kotler and Scheff 1997, Maitland 2000, Hazelwood et al. 2009). In addition to repertoire modifications, audience education and special pricing policies, customer-centered approaches include a deliberate loosening of concert etiquette: relaxed dress codes, snacks, drinks or promenading during performances etc.

Easier access and better comfort in classical music is driven by a mixture of commercial (broadening the market for classical performances), social (cultural participation as a means to foster social inclusion), aesthetic (arts without an audience are irrelevant) and politico-economic interests (rent seeking by a publicly-funded cultural bureaucracy). As Kawashima (2006) and Sigurjonsson (2010) argue, such a “culture for all”-approach is in marked contrast to the socio-economic views, outlined in the Section 5, that cultural practices are instrumental in marking social distinction.

Loosening concert etiquette with the aim of lowering barriers for classical music consumption may indeed involve a trade-off between equity and efficiency. It works socially inclusive and equalizing -- while destroying the preconditions for certain, highly esteemed modes of music production and performance to which it is meant to provide access. Well-intentioned attempts to make classical

concerts more inviting to the masses may actually cause the classical concert or at least most of its fancy repertoire to go extinct. Probably not by coincidence, the programming in concerts with a relaxed etiquette often is reduced to easy-to-listen classical hits. Audiences with almost no requirement of concentration cannot possibly apprehend the complexity and meanings of music composed for undistracted and focused reception.

6.4 Dynamic social norms

Over the past decades, classical music lost its potential as a marker of social status, propriety or political correctness or as a substitute for religion; processes of informalization or the ubiquitous availability of recorded music also contributed to downgrading concert rituals. Concert etiquette today may appear as a cultural relict, a set of norms inherited from, and potentially valuable in a past where the incentive system was different. However, appropriateness or obsolescence need not be relevant for a norm's salience. What matters is the intensity with which a norm is perceived -- which depends on the proportion of norm followers to norm violators (see, e.g., Huck et al. 2010). Endogeneity -- where the obedience to a norm depends on the degree to which people expect norm obedience -- gives rise to intriguing multiplicity and contingency issues: two identical societies with the same exogenous norms and unbiased perceptions of how members in society behave nevertheless may end up with distinct outcomes: widespread norm obedience in one society and norm erosion in the other. Hence, the observed unruliness of an audience need not at all be indicative of a lack in concert etiquette.

Things become more complex when perceptions of norm obedience are biased. Cultural pessimism may be a case in point: psychologists find a general tendency to underestimate the proportion of people who perform socially desirable actions (Goethals et al. 1991). This bias increases the probability that aggregate behavior will converge to a "bad" equilibrium with many norm violators (Cooter et al. 2006). Lamenting of declining concert virtues, even when unsubstantiated, actually undermines conformity to social norms. Nostalgic audiences may paradoxically cause concert etiquette to derail; cough frequencies then actually become proxies for the degree of cultural pessimism.

7. Conclusion

In a lesser known essay, Adam Smith (1795) explains that a well-composed piece of music

“presents an object so agreeable, so great, so various, and so interesting, that alone (...) it can occupy, and as it were fill up, completely the whole capacity of the mind, so as to leave no part of its attention vacant for thinking of anything else. (...) [It] not only does not require, but it does not admit of any accompaniment.”

Obviously, in Smith’s view, the aesthetic qualities of such artistic works are independent of social contexts and surroundings. “Accompaniments” of any sort – which, although Smith may not have envisaged it, include coughing and other participatory actions of the audience during its performance – are unwarranted, unnecessary and potentially detrimental to music’s beauty. Much in the spirit of Weber, Hanslick or Adorno, audiences should then consist of monads seeking the pure experience of the artworks in the crystalline atmosphere of an ideal concert.

Real-world *musicking* works differently (Small 1998): artistic works, their performance and reception are shaped by opportunities, conventions, and constraints. To paraphrase Currid (2007), the spillovers in the concert – of the music proper, of coughs and of other audience reactions – are not accidental byproducts but rather the *raison d’être* of concerts. Much of the attraction of live music (of any genre) comes from the joint experience with others. Indeed, musicking often exhibits patterns of positive feedbacks -- the individual payoff from enjoying a concert increases with the number of people who also enjoy it. Generally, the public-goods character of a concert results both in pleasure and annoyance, generating positive as well as negative externalities. Moreover, there is a lot of “accompaniment”, both on the micro and the macro level. With music it does not only matter *what* is consumed; the way this consumption is *socially understood* may be even more important. Listening to music evokes identity, prestige, exclusion, conformity, affirmation of values and shared aesthetic experiences. In classical music, both the norms of concert courtesy (not to cough, say) and individual disobedience to these rules (the deliberate cough) reflect these social phenomena.

References

- Abbing, Hans, 2006, *From High Art to New Art*. Amsterdam: Amsterdam University Press.
- Adorno, Theodor W., 1949[2006], *The Philosophy of Modern Music*. Minneapolis: University of Minnesota Press. [German original: *Philosophie der neuen Musik*. Tübingen].
- Akerlof, George A., and Rachel Kranton, 2000, Economics and Identity. *Quarterly Journal of Economics* 115, 715-753.
- Auerochs, Bernd, 2009, *Die Entstehung der Kunstreligion*. 2nd edition. Goettingen: Vandenhoeck & Ruprecht.
- Bakagiannis, Sotirios, and Mark Tarrant, 2006, Can Music Bring People Together? Effects of Shared Musical Preference on Intergroup Bias in Adolescence. *Scandinavian Journal of Psychology* 47, 129–136.
- Bartlett, Dale L., 1996, Physiological Responses to Music and Sound Stimuli. In: Donald A. Hodges (Ed.), *Handbook of Music Psychology* (2nd edition). Saint Louis: MMB Music. Pp. 343-385.
- Berger, Jonah, and Chip Heath, 2008, Who Drives Divergence? Identity-Signaling, Outgroup Dissimilarity, and the Abandonment of Cultural Tastes. *Journal of Personality and Social Psychology* 95, 593-607.
- Berger, Jonah, and Chip Heath, 2007, Where Consumers Diverge from Others: Identity-Signaling and Product Domains. *Journal of Consumer Research* 34, 121-134.
- Bernheim, B. Douglas, 1994, A Theory of Conformity. *Journal of Political Economy* 102, 841–877.
- Bikhchandani, Sushil, David Hirshleifer, and Ivo Welsh, 1992, A Theory of Fads, Fashion, Custom, and Cultural Change as Informational Cascades. *Journal of Political Economy* 100, 992-1026.
- Birring, Surinder S. et al., 2006, Cough Frequency, Cough Sensitivity and Health Status in Patients with Chronic Cough. *Respiratory Medicine* 100, 1105-1109.
- Borgonovi, Francesca, 2004, Performing Arts Attendance: An Economic Approach. *Applied Economics* 36, 1871-1885.
- Botstein, Leon, 2010, Max Weber and Music History. *Musical Quarterly* 93, 183-191.
- Bourdieu, Pierre, 1984 [1979], *Distinction: A Social Critique of the Judgement of Taste*. Cambridge: Harvard University Press.
- Bowie, Andrew, 1999, Adorno, Heidegger and the Meaning of Music. *Thesis Eleven* 56, 1-23.
- Bull, Michael, 2000, *Sounding out the City: Personal Stereos and the Management of Everyday Life*. Oxford: Berg.

- Cammarota, Giovanni et al., 2007, Reflux Symptoms in Professional Opera Choristers. *Gastroenterology* 132, 890-898.
- Carruthers, Glen, 2000, Concert Etiquette in Beethoven's Time. *Musick* 21, 15-19.
- Chanan, Michael, 1994, *Musica Practica: The Social Practice of Western Music from Gregorian Chant to Postmodernism*. London/New York: Verso.
- Chung, Kian Fan, John G. Widdicombe, and Homer A. Boushey (Eds.), 2003, *Cough: Causes, Mechanisms and Therapy*. Oxford: Blackwell.
- Cooter, Robert D., Michal Feldman, and Yuval Feldman, 2006, The Misperception of Norms: The Psychology of Bias and the Economics of Equilibrium. http://works.bepress.com/robert_cooter/138
- Currid, Elizabeth, 2007, The Economics of a Good Party: Social Mechanics and the Legitimization of Art/Culture. *Journal of Economics and Finance* 31, 386-394.
- Curtis, Valerie, Mícheál de Barra, and Robert Aunger, 2011, Disgust as an Adaptive System for Disease Avoidance Behaviour. *Philosophical Transactions of the Royal Society B* 366, 389-401.
- Davies, Stephen, 2003, John Cage's 4'33'': Is it Music? In: Davies Stephen, *Themes in the Philosophy of Music*. Oxford: Oxford University Press. Pp. 11-29.
- Dicpinigaitis, Peter V., 2006, Angiotensin-Converting Enzyme Inhibitor-Induced Cough. *Chest* 129, 169S-173S.
- Eccles, Ron, 2009, Central mechanisms IV: Conscious Control of Cough and the Placebo Effect. *Handbook of Experimental Pharmacology* 187, 241-262.
- Eckhardt, Josef, Erik Pawlitza, and Thomas Windgasse, 2006, Besucherpotenzial von Opernaufführungen und Konzerten der klassischen Musik. *media Perspektiven* 5/2006, 273-282.
- Elias, Norbert, 2000, *The Civilizing Process*. Oxford: Blackwell.
- Elster, John, 1999, *Alchemies of the Mind*. New York: Cambridge University Press.
- Elster, John, 1986, Introduction. In: J. Elster (Ed.), *Rational Choice*. Oxford: Blackwell. Pp. 1-33.
- Festré, Agnès, 2010, Incentives and Social Norms: a Motivation-Based Economic Analysis of Social Norms. *Journal of Economic Surveys* 24, 511-538.
- Goethals, George R., David M. Messick, and Scott T. Allison, 1991, The Uniqueness Bias: Studies of Constructive Social Comparison. In: Suls, Jerry and Thomas Ashby Wills (Eds.), *Social Comparison: Contemporary Theory and Research*. Hillsdale: Lawrence Erlbaum . Pp. 149-176.

- Hamlin, Alan, and Colin Jennings, 2011, Expressive Political Behaviour: Foundations, Scope and Implications. Forthcoming, *British Journal of Political Science*.
- Hand, Brian, 2000, The Audience as Producers. *CIRCA Art Magazine* No. 94, 32-36.
- Hanslick, Eduard, 1982 [1854], Vom Musikalisch-Schönen. In: Eduard Hanslick, *Vom Musikalisch-Schönen. Aufsätze, Musikkritiken*. Leipzig: Reclam. Pp. 33-145.
- Harré, Rom, 1994, Emotion and Memory: The Second Cognitive Revolution. *Royal Institute of Philosophy Supplement* 37, 25-40.
- Hazelwood, Emma , Rob Lawson and Rob Aitken, 2009, An Essential Guide to Audience Development. *Marketing Intelligence & Planning* 27, 789-804.
- Hennion, Antoine, 2001, Music Lovers: Taste as Performance. *Theory, Culture & Society* 18, 1-22.
- Hillman, Arye L., 2010, Expressive Behaviour in Economics and Politics. *European Journal of Political Economy* 26, 403-418.
- Hodges, Donald A., 2010, Psychophysiological Measures. Chapter 11 in: Patrick N. Juslin and John A. Swoboda (Eds.), *Handbook of Music and Emotion. Theory, Research, and Applications*. Oxford: Oxford University Press. Pp. 279-311.
- Hsu J.-Y. et al., 1994, Coughing Frequency in Patients with Persistent Cough Using a 24-Hour Ambulatory Recorder. *European Respiratory Journal* 7, 1246–1253.
- Huck, Steffen, Dorothea Kübler, and Jörgen Weibull, 2010, Social Norms and Economic Incentives in Firms. IZA Discussion Paper No. 5264. Bonn: Institute for the Study of Labor (IZA).
- Huron, David, 2005, The Plural Pleasures of Music. In: Johan Sundberg and William Brunson (Eds.), *Proceedings of the 2004 Music and Music Science Conference*. Stockholm: Kungliga Musikhögskolan & Royal Institute of Technology. Pp. 1-13.
- Iannaccone, Laurence, 1992, Sacrifice and Stigma: Reducing Free-riding in Cults, Communes, and Other Collectives. *Journal of Political Economy* 100, 271-291.
- Jackson, Matthew O., 2008, *Social and Economic Networks*. Princeton: Princeton University Press.
- Jensen, Joli, 2002, *Is Art Good For Us? Beliefs about High Culture in American Life*. Lanham: Rowman & Littlefield.
- Johnson, James H., 1995, *Listening in Paris: A Cultural History*. Berkeley and Los Angeles: University of California Press.
- Kawashima, Nobuko, 2006, Audience Development and Social Inclusion in Britain. *International Journal of Cultural Policy* 12, 55–72.
- Kishon, Ephraim, 1989, The Philharmonic Cough. In: Ephraim Kishon, *The Funniest Man in the*

World. Pp. 150-107.

- Kolb, Bonita M., 2001, *The Effect of Generational Change on Classical Music Concert Attendance and Orchestras' Responses in the UK and US*. London: Policy Studies Institute.
- Kotler, Philip, and Joanne Scheff, 1997, *Standing Room Only: Strategies for Marketing the Performing Arts*. Boston: Harvard Business School Press.
- Kramer, Elizabeth A., 2005, *The Idea of Kunstreligion in German Musical Aesthetics of the Early Nineteenth Century*. Ph.D. thesis. University of North Carolina at Chapel Hill.
- Kuran, Timur, 1995, *Private Truths, Public Lies: The Social Consequences of Preference Falsification*. Cambridge: Harvard University Press.
- Kuran, Timur, 1990, Private and Public Preferences. *Economics and Philosophy* 6, 1–26.
- Lee, P.C.L., C. Cotterill-Jones, and R. Eccles, 2002, Voluntary Control of Cough. *Pulmonary Pharmacology & Therapeutics* 15, 317-320.
- Leibenstein, Harvey, 1950, Bandwagon, Snob, and Veblen Effects in the Theory of Consumers' Demand. *Quarterly Journal of Economics* 65, 183-207.
- Leppert, Richard, 2002, The Social Discipline of Listening. In: Hans Reich Bödeker et al. (Eds.), *Le concert et son public. Mutations de la vie musicale en Europe de 1780 à 1914*. Paris: Editions de la Maison des Sciences de l'Homme. Pp. 459-485.
- Lévy-Garboua, Louis, Claude Meidinger, and Benoît Rapoport, 2006, The Formation of Social Preferences: Some Lessons from Psychology and Biology. In: Serge Kolm and Jean Mercier Ythier (Eds.), *Handbook on the Economics of Giving, Reciprocity and Altruism*, Vol. 1. Amsterdam: Elsevier. Pp. 545-613.
- Locke, Ralph P., 1993, Music Lovers, Patrons, and the "Sacralization" of Culture in America. *19th-Century Music* 17, 149-173.
- Loudon, Robert G., 1967, Cough in Health and Disease. *Current Research in Chronic Obstructive Lung Disease*. In: *Proceedings of the 10th Aspen Emphysema Conference*. Public Health Service Publication No. 1787. Arlington: US Department of Health, Education & Welfare. Pp. 41–53.
- Maitland, Heather, 2000, *A Guide to Audience Development*. London: Arts Council of England.
- McVeigh, Simon, 1993, *Concert Life in London from Mozart to Haydn*. Cambridge: Cambridge University Press.
- Metzger, Heinz-Klaus, 1999, Rituelle Aspekte des bürgerlichen Musiklebens. In: Barbara Barthelmes and Helga de la Motte-Haber (Eds.), *Musik und Ritual*. Mainz: Schott. Pp 18-30.
- Morice, Alyn H. et al., 1989, Cough Associated with Angiotensin Converting Enzyme Inhibition.

- Journal of Cardiovascular Pharmacology 13 (Supplement 3), S59–S62.
- Müller, Sven Oliver, 2006, Distinktion, Demonstration und Disziplinierung: Veränderungen im Publikumsverhalten in Londoner und Berliner Opernhäusern im 19. Jahrhundert. *International Review of the Aesthetics and Sociology of Music* 37, 167-187.
- North, Adrian C., Lucy Desborough, and Line Skarstein, 2005, Musical Preference, Deviance, and Attitudes towards Music Celebrities. *Personality and Individual Differences* 38, 1903-1914.
- North, Adrian C. and David J. Hargreaves, 2010, Experimental Aesthetics and Liking for Music. Chapter 19 in: Patrick N. Juslin and John A. Swoboda (eds.), *Handbook of Music and Emotion. Theory, Research, and Applications*. Oxford University Press: Oxford. Pp. 515-545.
- North, Adrian C. and David J. Hargreaves, 2008, *The Social and Applied Psychology of Music*. Oxford University Press: Oxford.
- North, Adrian C. and David J. Hargreaves, 2007, Lifestyle Correlates of Musical Preference: 3. Travel, Money, Education, Employment, and Health. *Psychology of Music* 35, 473-497.
- North, Adrian C. and David J. Hargreaves, 1999, Music and Adolescent Identity. *Music Education Research* 1, 75-92.
- Ollivier, Michèle, 2008, Models of Openness to Cultural Diversity: Humanist, Populist, Practical and Indifferent Omnivores. *Poetics* 36, 120-147.
- Olson, Daniel V. A. and Paul Perl, 2005, Free and Cheap Riding in Strict Conservative Churches. *Journal for the Scientific Study of Religion* 44, 123-142.
- Pennebaker, James W., 1982, *The Psychology of Physical Symptoms*. New York: Springer.
- Pennebaker, James W., 1980, Perceptual and Environmental Determinants of Coughing. *Basic and Applied Social Psychology* 1, 83-91.
- Peterson, Richard A., 1997, The Rise and Fall of Highbrow Snobbery as a Status Marker. *Poetics* 25, 75-92.
- Peterson, Richard A. and Roger M. Kern, 1996, Changing Highbrow Taste: From Snob To Omnivore. *American Sociological Review* 61, 900-907.
- Radbourne, Jennifer et al., 2009, Audience Experience: Measuring Quality in the Performing Arts. *International Journal of Arts Management* 11, 16-29.
- Reiber, Joachim, 2005, "Beifallsbezeugungen u. dgl." -- Geräusche im Konzerte. *Zeitschrift der Gesellschaft der Musikfreunde in Wien*. March 2005.
- <http://www.musikverein.at/monatszeitung/monatszeitungvoll.asp?idx=577>
- Rentfrow, Peter J., and Samuel D. Gosling, 2003, The Do Re Mi's of Everyday Life: The Structure and

- Personality Correlates of Music Preferences. *Journal of Personality and Social Psychology* 84, 1236-1256.
- Robinson, Dwight E., 1961, The Economics of Fashion Demand. *Quarterly Journal of Economics* 75, 376-398.
- Salganik, Matthew J., Peter S. Dodds, and Duncan J. Watts, 2006, Experimental Study of Inequality and Unpredictability in an Artificial Cultural Market. *Science* 311, 854-856.
- Salmen, Walter, 1988, *Das Konzert. Eine Kulturgeschichte*. München: Beck.
- Scherer, Frederic M., 2003, *Quarter Notes and Bank Notes: The Economics of Music Composition in the Eighteenth and Nineteenth Centuries*. Princeton: Princeton University Press.
- Scherer, Frederic M., 2001, The Evolution of Free-Lance Music Composition, 1650–1900. *Journal of Cultural Economics* 25, 307-319.
- Scherer, Klaus R., 2004, Which Emotions Can be Induced by Music? What are the Underlying Mechanisms? And How Can We Measure Them? *Journal of New Music Research* 33, 239-251.
- Schuessler, Alexander A., 2000, *A Logic of Expressive Choice*. Princeton: Princeton University Press.
- Schulz, Alexander, 2005, Husten und Auswurf. Presentation at the „Patientenkongress der Deutschen Lungenstiftung“. Hannover, October 1, 2005.
- Schwab, Heinrich W., 1980, *Konzert. Öffentliche Musikdarbietung vom 17. bis 19. Jahrhundert*. 2nd edition. Leipzig: Deutscher Verlag für Musik.
- Sennett, Richard, 1978, *The Fall of the Public Man: On the Social Psychology of Capitalism*. New York: Vintage Books.
- Sigurjonsson, Njordur, 2010, Orchestra Audience Development and the Aesthetics of “Customer Comfort”. *Journal of Arts Management, Law, and Society* 40, 266-278.
- Simonyan, Kristina et al., 2007, Functional Neuroanatomy of Human Voluntary Cough and Sniff Production. *Neuroimage* 37, 401-409.
- Small, Christopher, 1998, *Musicking: The Meanings of Performing and Listening*. Middletown: Wesleyan University Press.
- Small, Christopher, 1987, Performance as Ritual: Sketch for an Enquiry into the True Nature of a Symphony Concert. In: Avron L. White (Ed.), *Lost in Music. Culture, Style and the Musical Event*. London/New York: Routledge & Kegan Paul. Pp. 6–32.
- Smith, Adam, 1795, Of the Nature of that Imitation which Takes Place in What are Called The Imitative Arts/Of the Affinity Between Music, Dancing, and Poetry. Glasgow Edition of the Works and Correspondence (Vol. 3). Online at:

http://oll.libertyfund.org/?option=com_staticxt&staticfile=show.php%3Ftitle=201&chapter=56033&layout=html&Itemid=27

- Smith, J. David, and Jordan N. Witt, 1989, Spun Steel and Stardust: The Rejection of Contemporary Compositions. *Music Perception* 7, 169-185.
- Smithuijsen, Cas, 2001, *Een Verbazende Stilte. Klassieke Muziek, Gedragsregels en Sociale Controle in de Concertzaal*. Amsterdam: Boekmanstudies.
- Sullivan, Oriël, and Tally Katz-Gerro, 2007, The Omnivore Thesis Revisited: Voracious Cultural Consumers. *European Sociological Review* 23, 123-137.
- Tekman, Hasan G., and Nuran Hortaçsu, 2002, Music and Social Identity: Stylistic Identification as a Response to Musical Style. *International Journal of Psychology* 37, 277-285.
- Toma, Michael, and Holly Meads, 2007, Recent Evidence on the Determinants of Concert Attendance for Mid-Size Symphonies. *Journal of Economics and Finance* 31, 412-421
- Weber, Margot, 2006, Das Geheimnis der Leichtigkeit: Alfred Brendel. *Zeitschrift der Gesellschaft der Musikfreunde in Wien*. May/June 2006.
- <http://www.musikverein.at/monatszeitung/monatszeitung.asp?idx=745>
- Weber, Max, 1969, *The Rational and Social Foundations of Music*. London: Arcturus Books.
- Weber, William, 2001, From Miscellany to Homogeneity in Concert Programming. *Poetics* 29, 125-134.
- Weber, William, 1997, Did People Listen in the 18th Century? *Early Music* 25, 678–691.
- Wouters, Cas, 1986, Formalization and Informalization: Changing Tension Balances in Civilizing Processes. *Theory, Culture and Society* 3, 1-18.